



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/998,819

10/25/2001

Edward P. Campbell

01-1014

5915

7590 01/15/2008
McDonnell Boehnen Hulbert & Berghoff
32nd Floor
300 S. Wacker Drive
Chicago, IL 60606

EXAMINER

MIRZA, ADNAN M

ART UNIT

PAPER NUMBER

2145

MAIL DATE

DELIVERY MODE

01/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/998,819	Applicant(s) CAMPBELL ET AL.	
	Examiner ADNAN M. MIRZA	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,8-11,13-15,17-19,21-23,25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8-11,13-15,17-19,21-23,25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2,4-6,8-11,13-15,17-19,21-23,25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sampson et al (U.S. 6,490,624) as and further in view of Hanson et al (U.S. 6546,425).

As per claim 1,8 Sampson disclosed a method for controlling a plurality of communication sessions on a mobile terminal in a communication system, the method comprising: establishing a first voice over IP communication session at the mobile terminal; sending a signaling message to the mobile terminal indicating a second voice over IP communication session to be connected to the mobile terminal (col.3, lines 57-67); determining at the mobile terminal whether the second voice over IP communication session is accepted and the first voice over communication session is put on hold on the mobile terminal; and, if so, sending a policy management control message to a serving node associated with the mobile node (col. 18, lines 31-44),.

However Samson did not disclose in detail the policy management control message including instructions to intercept on the serving node a data flow associated with the first voice over communication session, and further to use an existing air interface associated with the first voice over IP communication session for communicating data associated with the second voice over IP communication session, wherein the air interface comprises multiple channels.

In the same field of endeavor Hanson disclosed, “A Mobility Management Server (MMS) coupled to the mobile interconnect maintains the state of each of any number of Mobile End Systems (MES) and handles the complex session management required to maintain persistent connections to the network and to peer application processes. If a Mobile End system becomes unreachable, suspends or changes network address (e.g., due to roaming from one network interconnect to another), the Mobility Management Server maintains the connection to the associated peer-allowing the Mobile End System to maintain a continuous virtual connection even though it may temporarily lose its actual physical connection” (col. 2, lines 55-67).

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have incorporated A Mobility Management Server (MMS) coupled to the mobile interconnect maintains the state of each of any number of Mobile End Systems (MES) and handles the complex session management required to maintain persistent connections to the network and to peer application processes. If a Mobile End system becomes unreachable, suspends or changes network address (e.g., due to roaming from one network interconnect to another), the Mobility Management Server maintains the connection to the associated peer-

allowing the Mobile End System to maintain a continuous virtual connection even though it may temporarily lose its actual physical connection as taught by Hanson in the method and system of Samson to avoid the risk of losing data because of the interception as it travels over public airways or public wire-line infrastructures.

3. As per claims 2,9,14 Sampson-Hanson disclosed a computer readable medium having stored therein instructions (Samson, col. 17, lines 57-65).

4. As per claims 15 Sampson-Hanson disclosed wherein the second signaling message is sent from the mobile node to a signaling node, the method further comprising: sending a policy control message from the signaling node to a serving node associated with mobile node, wherein the policy control message includes instructions to intercept the first data flow and further to activate the second data flow on the air interface (Samson, col. 18. lines 31-44).

5. As per claims 4,10 Sampson-Hanson disclosed wherein the step of intercepting data flow associated with the first voice over IP communication session comprises intercepting at a serving node the data flow associated with the first voice over IP communication session (Samson, col.3, lines 57-67).

6. As per claims 5,17,21 Sampson-Hanson disclosed wherein the serving node comprises a packet data serving node (PDSN) or gateway general packet radio service support node (GGSN) (Samson, col.17, lines 45-57).

7. As per claims 6,11 Sampson-Hanson disclosed wherein switching data flow associated with the second voice over IP communication session to the air interface channel comprises using an existing communication channel associated with the first voice over IP communication session for the data flow associated with the second voice over IP communication session (Hanson, col.2, lines 55-67).

8. As per claim 13,18,22 Sampson-Hanson disclosed a method for controlling a plurality of communication sessions on a mobile node, the method comprising: communicating data associated with a first communication session on the mobile node; receiving a first signaling message on the mobile node, the first signaling message indicating a second communication session to be connected to the mobile node (Samson, col. 10, lines 41-60); notifying a user of the mobile node about the second communication session, wherein the user is notified using an identifier selected on the mobile node based on a data type associated with the second communication session; determining if the second communication session is accepted by the user (Samson, col. 14, lines 24-49); if so sending a second signaling message from the :mobile node, the second signaling message comprising instructions to put the first communication session on hold and activate the second communication session; intercepting a first data flow associated with the first communication session to the mobile node; and switching a second data flow associated with the second communication session to an air interface associated with the first communication session (Hanson, col. 2, lines 55-67).

9. As per claim 19 Sampson-Hanson disclosed wherein the air interface comprises a plurality of communication channels, and the network device is configured to terminate data communication associated with the first voice over IP communication session to the mobile node and further to switch the second voice over IP communication session to the air interface channel associated with the first communication session (Samson, col.3, lines 57-67).

10. As per claims 26 Sampson-Hanson disclosed wherein the first voice over IP communication session is associated with a first communication channel over the air interface, and the serving node is configured to terminate data communication associated with the first voice over IP communication session and further to switch data communication associated with the second voice over IP communication session to the first communication channel (Samson, col. 9, lines 53-59).

11. As per claim 23 Sampson-Hanson disclosed wherein the serving node comprises a packet data serving node (PDSN) or a gateway general packet radio service support node (GGSN), and the mobile node comprises a mobile router or a mobile client device (Samson, col.17, lines 45-57).

12. As per claim 25 Sampson-Hanson disclosed wherein the serving node further configured to terminate communication of data associated with the first voice over IP communication session (Samson, col. 16, lines 58-64).

Response to Arguments

13. Applicant's arguments filed 11/08/2007 have been fully considered but they are not persuasive. Response to applicants arguments are as follows.

A. Applicant argued that Hanson failed to discuss of “intercepting data flow associated with the first voice over IP communication session on an air interface channel and switching data flow associated with the second voice over IP communication session to the air interface channel”.

As to applicant's argument Hanson disclosed, “A Mobility Management Server (MMS) coupled to the mobile interconnect maintains the state of each of any number of Mobile End Systems (MES) and handles the complex session management required to maintain persistent connections to the network and to peer application processes. If a Mobile End system becomes unreachable, suspends or changes network address (e.g., due to roaming from one network interconnect to another), the Mobility Management Server maintains the connection to the associated peer-allowing the Mobile End System to maintain a continuous virtual connection even though it may temporarily lose its actual physical connection” (col. 2, lines 55-67)

B. Applicant argued that Hanson failed to disclose the general architecture of a wireless proxy server”.

As to applicants argument Hanson disclosed “some Mobile End Systems 104a-104k may communicate with Mobility Management Server 102 via a mobile interconnect (wirelessly in this case) e.g., conventional electromagnetic (e.g, radio frequency) transceivers coupled to wireless in or wire line) local are or wide area network (col. 7, lines 52-55)

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Adnan Mirza whose telephone number is (571)-272-3885.

Art Unit: 2145

16. The examiner can normally be reached on Monday to Friday during normal business hours. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571)-272-3933. The fax for this group is (703)-746-7239. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866)-217-9197 (toll-free).

Adnan Mirza

/A. M. M./

Examiner, Art Unit 2145

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2145